Thin Solid Films, *152* (1987) 555–557

Contents of Vol. 152

PREPARATION AND CHARACTERIZATION

Preface 1
P. Stroeve (Davis, CA, U.S.A.) and E. I. Franses (West Lafayette, IN, U.S.A.)

Experimental criteria for monolayer studies in relation to the formation of Langmuir–Blodgett multilayers 3
B. A. Pethica (Parsippany, NJ, U.S.A.)

Experimental considerations in insoluble spread monolayers 9
J. Mingins (Norwich, U.K.) and N. F. Owens (London, U.K.)

Pre-Langmuir–Blodgett monolayers 29
J. A. Mann, G. J. Tjatjopoulos, M.-O. J. Azzam, K. E. Boggs, K. M. Robinson and J. N. Sanders (Cleveland, OH, U.S.A.)

Molecular structure and interfacial properties of surfactant-coated surfaces 49
S. Garoff (Ridgefield, CT, U.S.A.)

Physical properties of ordered ultrathin organic films 67
T. W. Barrett (Arlington, VA, U.S.A.)

Chemistry of polymer molecules for ultrathin films 99
P. Le Barny (Orsay, France)

Structure of Langmuir–Blodgett films 151
J. D. Swalen (San Jose, CA, U.S.A.)

Defect characterization and detection in Langmuir–Blodgett films 155
P. Lesieur, A. Barraud and M. Vandevyver (Gif sur Yvette, France)

Characterization of the structure of Langmuir–Blodgett films by short-wavelength radiations . . . 165
M. Pomerantz (Yorktown Heights, NY, U.S.A.)

Lipid-based tubule microstructures 181
J. M. Schnur, R. Price, P. Schoen, P. Yager (Washington, DC, U.S.A.), J. M. Calvert, J. Georger and A. Singh (Newton, MA, U.S.A.)

Oriented ultrathin membranes from monomeric and polymeric amphiphiles: monolayers, liposomes and multilayers 207
H. Ringsdorf, G. Schmidt and J. Schneider (Mainz, F.R.G.)

Langmuir–Blodgett films made from preformed polymers 223
R. H. Tredgold (Lancaster, U.K.)

Organic films in non-linear integrated optics structures 231
G. I. Stegeman, C. T. Seaton and R. Zanoni (Tucson, AZ, U.S.A.)

Langmuir–Blodgett films and non-linear optics 265
G. Khanarian (Summit, NJ, U.S.A.)

Non-linear optical effects in thin organic polymeric films 275
P. N. Prasad (Buffalo, NY, U.S.A.)

Optical second-harmonic generation as an orientational probe in poled polymers 295
G. T. Boyd (Saint Paul, MN, U.S.A.)

Molecular engineering in Japan—a prospect of research on Langmuir–Blodgett films 305
M. Sugi (Ibaraki, Japan)

Phase-controlled surface reactions 327
J. B. Lando and S. E. Rickert (Cleveland, OH, U.S.A.)

Thin organic films of proteins 335
J. D. Andrade (Salt Lake City, UT, U.S.A.)

Langmuir–Blodgett films and black lipid membranes in biospecific surface-selective sensors . . . 345
W. M. Reichert, C. J. Bruckner and J. Joseph (Salt Lake City, UT, U.S.A.)

Future applications of ordered polymeric thin films 377
S. T. Kowel, R. Selfridge, C. Eldering, N. Matloff, P. Stroeve, B. G. Higgins, M. P. Srinivasan and L. B. Coleman (Davis, CA, U.S.A.)

Molecular engineering of ultrathin polymeric films: a synopsis. 405
P. Stroeve (Davis, CA, U.S.A.) and E. I. Franses (West Lafayette, IN, U.S.A.)

ELECTRONICS AND OPTICS

The near-IR surface impedance of thin metallic films with unlike surfaces 411
J. C. Dudek (Paris, France)

Measurement of optical losses and damage resistance of ZnS–Na_3AlF_6 and TiO_2–SiO_2 laser mirrors depending on coating design 433
E. Welsch, H. G. Walther (Jena, G.D.R.), D. Schäfer (Berlin, G.D.R.) and R. Wolf (Mittweida, G.D.R.)

Voltaic cells of $(Zn_xCu_y)O_z$ thin films deposited by r.f. sputtering 443
M. Fujinaka, T. Tanaka and T. Satoh (Tokyo, Japan)

Analysis of the dose dependence of the thermoelectric power of ion-bombarded Bi/Sb thin films. 449
A. M. Ibrahim (Ontario, Canada)

Formation and magnetic properties of artificial superlattice of CoO–Fe_3O_4. 455
T. Terashima and Y. Bando (Kyoto, Japan)

Transmittance of thin metal films near the percolation threshold 465
Y. Yagil and G. Deutscher (Tel Aviv, Israel)

Breakdown conduction in carbon thin film devices with silver film contacts on glass substrates . . 473
H. Araki and T. Hanawa (Osaka, Japan)

Electroforming of a carbon thin film device with a silver film 481
H. Araki and T. Hanawa (Osaka, Japan)

A new model for electron movement in a thick film resistor and its application to analysis of the structure and conduction mechanism in these resistors 487
E. M. Winkler and G. K. Steenvoorden (Delft, The Netherlands)

New evidence for the validity of the Fuchs–Sondheimer theory 499
D. Schumacher (Düsseldorf, F.R.G.)

METALLURGICAL AND PROTECTIVE COATINGS

Diffusion measurements in the metallic glass $Fe_{80}B_{20}$. 511
S. K. Sharma, Kuldeep and A. K. Jain (Bombay, India)

Thick magnesium films produced by deposition techniques 525
T. G. Nieh and J. Wadsworth (Palo Alto, CA, U.S.A.)

PREPARATION AND CHARACTERIZATION

The effect of the deposition rate on the properties of d.c. magnetron-sputtered niobium nitride thin films. 535
M. J. Deen (Burnaby, Canada)

GENERAL FILM BEHAVIOUR

Adsorption of lithium and oxygen on gallium arsenide 545
C. Argile and G. E. Rhead (Paris, France)

LETTERS

Microhardness measurements on boron coatings L131
V. C. George, A. K. Dua and R. P. Agarwala (Bombay, India)

Transparent carbon film electrodes for IR investigations of polyvinylidene fluoride L135
A. Büchtemann and E. Schulz (Teltow-Seehof, G.D.R.)

UV losses in MgF_2 thin films induced by the evaporation boat L139
Ch. Gloede, N. Kaiser, R. Mattheis and H. Müller (Jena, G.D.R.)

Plasma-sprayed high T_c superconductor coatings L143
L. S. Wen, S. W. Qian, Q. Y. Hu, B. H. Yu, H. W. Zhao, K. Guan, L. S. Fu and Q. Q. Yang (Shenyang, China)

AUTHOR INDEX 553